



State of Utah

Department of
Environmental Quality

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DAQ-074-06

MEMORANDUM

TO: Utah Air Quality Board

THROUGH: Richard W. Sprott

FROM: Bill Reiss

DATE: November 1, 2006

SUBJECT: Propose for Public Comment; Amend R307-210, Stationary Sources; Amend R307-220, Emission Standards: Plan for Designated Facilities and Add New Section IV, Plan for Mercury Emissions at Coal-Fired Electric Generating Units; Add New Rule R307-224, Mercury Emission Standards: Coal-Fired Electric Generating Units; and Add New Rule R307-424, Permits: Mercury Requirements for Electric Generating Units.

Background:

On May 18, 2005 EPA released its Clean Air Mercury Rule (CAMR) to address airborne mercury emissions from Electric Generating Units (EGUs.) The rule generally applies to any stationary coal-fired boiler, serving a generator with nameplate capacity of more than 25 megawatts.

The CAMR has been structured as part of the New Source Performance Standards (NSPS.) Any new unit (commencing construction after January 30, 2004) will be required to meet emission limits for mercury in the revised NSPS.

In order to address pre-existing units that would otherwise have been affected by the rule, Utah must prepare what is called a Designated Facilities Plan (DFP or the Plan). The Plan must demonstrate that, beginning in 2010, mercury emissions from all of the affected EGUs under the State's jurisdiction will be no greater than the mercury emission budgets allocated to Utah under the CAMR.

The CAMR program will take place in two phases, reflecting a two-tiered reduction in nation-wide mercury emissions from an estimated 48 tons in 1999. Phase one will begin in 2010 and run through 2017. Under Phase one, EPA will issue a total number of mercury allowances equal to 38 tons. Phase two begins

in 2018. Under Phase two, EPA will reduce the number of allowances to a corresponding nationwide emission rate of 15 tons per year.

Utah's allowances under the CAMR will be 0.506 tons per year in Phase one and 0.200 tons per year in Phase two. As a point of comparison, EPA estimates that EGUs in Utah emitted 0.142 tons of mercury in 1999. Utah's budgets do not include emissions from Deseret Generation and Transmission (the Bonanza plant.) Rather, the Ute Indian Tribe has jurisdiction over that facility. The Utes are also given a budget under the CAMR.

EPA has proposed a "model rule" to satisfy the compliance element of the Designated Facilities Plan. The model rule is essentially a national cap and trade program. Sources within each state or tribal area could exceed this budget if they were to secure enough extra allowances to cover the overage.

States and tribes are free to participate in this national trading program or not. Should they choose not to take part, the DFP would have to outline alternative means of keeping the mercury emissions from these pre-existing facilities within the budgets allocated to that state or tribe. Presumably, this alternative means would involve emission limits and, like the model trading rule, would include provisions for monitoring, recordkeeping and reporting.

Today's Proposal:

Utah Division of Air Quality (DAQ) has drafted a suite of rules intended to implement a comprehensive strategy to address mercury emissions from EGUs.

This strategy includes participation in EPA's nationwide cap and trade program, with overall goals of reducing mercury emissions from an estimated 48 tons per year nationwide to 38 tons per year by 2010 and 15 tons per year by 2018.

It also includes state-only provisions which establish minimum performance criteria for existing EGUs and require offset for potential increases in mercury emissions.

The proposal is reflected in four separate rules as well as the Designated Facilities Plan. Each of these has been included in the packet, and a brief description is provided below:

R307-224 "Mercury Emission Standards: Coal-Fired Electric Generating Units" In this rule, Utah is proposing to incorporate by reference much of EPA's model rule which establishes a cap and trade program to ensure that mercury emissions from EGUs will remain in compliance with the emission budgets established for the State of Utah. Some parts of the model rule have specifically not been incorporated by reference.

"Designated Facilities Plan for Mercury (Hg) Emissions at Coal Fired Electric Generating Units" This Plan (or DFP) is required under 40 CFR 60.24 to address mercury emissions at qualifying coal-fired electric generating units that were in existence prior to EPA's new regulations under the New Source Performance Standards. Those parts of the model rule that have specifically not been incorporated by reference in R307-224 are addressed here in the DFP.

R307-220 "Emission Standards: Plan for Designated Facilities" In this rule, Utah incorporates by reference the entirety of its Designated Facilities Plan. The DFP includes sections covering: Municipal Solid Waste Landfills (Section I), Hospital, Medical, Infectious Waste Incinerators (Section II), Small

Municipal Waste Combustion Units (Section III), and now at R307-220-5 a new “Section IV, Coal-Fired Electric Generating Units”

R307-210 “Stationary Sources” In this rule, Utah incorporates by reference all of 40 CFR 60, Standards of Performance for New Stationary Sources. Much of EPA’s federal rulemaking with regard to mercury emissions from EGUs appears in part 60, and not all of it is contained in the Model Rule (which is subpart HHHH.) Subpart HHHH is specifically not incorporated by R307-210.

R307-424 “Permits: Mercury Requirements for Electric Generating Units” In this rule, Utah seeks to establish state-wide requirements for mercury emissions at coal-fired electric generating units. As proposed, the rule contains two distinct provisions: 1) a requirement that any existing EGU exceeding 1,500 MMbtu/hr (heat input capacity) meet certain emission rates or control efficiencies, and 2) an offset requirement for permitting increases in mercury emissions.

Recommendation:

DAQ staff recommends that the Utah Air Quality Board propose the attached rules and the Designated Facilities Plan for public comment.